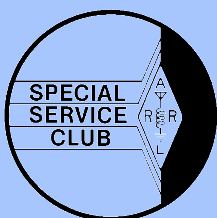




The Raleigh Amateur Radio Society's **EXCITER**

GET INVOLVED

- RARS General Membership meeting: Second Tuesday of the month.
- The RARS net meets every night except Saturday @ 8 p.m. on 146.640.
- The RARS Technical & Trader's net: Saturdays @ 8:00 PM on 146.64.
- RARS meets for a monthly dinner on the First Tuesday of each month.



PUBLIC SERVICE EVENTS

Interested in helping? Visit <https://www.rars.org/public-service.php>

frequently for our 2021 ham public service schedule.

RARS General Meeting

Main Topic: Awards, RARS Birthday Party & RARSfest update

Presenters: Awards committee & Nancy Torborg, KB2TNR

Date: March 8, 2022

Time: Meeting at 7:30 PM, informal gathering at 7PM on Zoom.

Where: Zoom

RARS Net Monthly Summary

February 2022 RARS 2-m nets

28 nets

436 checkins

909 minutes

KT4JR Julie Royster

RARS Officers

PRESIDENT

John Honeycutt
N8ZU
919.417.2477
jfh49@bellsouth.net

VICE PRESIDENT

Tom Lewis
N4TL
N4TL2@yahoo.com

SECRETARY

Mark Kilmer
KM4JRH
919.676.0110
mark.kilmer@gmail.com

TREASURER

Greg Seamster
KE4PAX
919.859.0029
KE4PAX@arrl.net



The Raleigh Amateur Radio Society

The Raleigh Amateur Radio Society, Inc. (RARS) was founded in 1969 and continues to serve and support the amateur radio community in the greater Triangle area. In 1999, the society incorporated a new RARS and obtained 501(c)(3) non-profit tax status.

The objectives of the club are to promote worldwide friendship through amateur radio; to be of public service by providing radio communications in times of disaster, emergency, or civic needs; to educate members in radio technique, and to provide training classes to assist in obtaining amateur radio licenses.

Anyone interested in amateur radio is eligible to apply for membership. Dues for regular licensed amateurs are \$18 per year (from July 1 through June 30). Additional immediate family members pay \$5 each per year. Dues for licensed amateurs older than 59 or younger than 16 are \$12 per year. Dues for non-licensed associate members are \$9 per year. Applications for membership may be obtained from the treasurer or on the RARS website.

<https://www.rars.org>

Exciter

The Exciter is the official newsletter of the Raleigh Amateur Radio Society. It appears each month as a PDF on the RARS website at www.rars.org. Members receive email notification when the latest version is available. Please provide your email address to the Treasurer.

The Exciter welcomes articles, advertisements, and other contributions. To submit a piece to the newsletter, please contact the Editor. The Editor reserves the right to edit any and all pieces. The submission deadline for each month's Exciter is the Saturday that is ten days before the general meeting. All submissions must be final. Drafts are not accepted.

The views expressed in the Exciter are those of the individual authors and do not necessarily reflect the views of the Editor or RARS.

Tom Lewis, N4TL, editor (editor@rars.org)

President's Message, March 2022

It's been quite some time since RARS has held regular club meetings in-person, but that's about to change. March and April are shaping up to be active months for everyone who has missed in-person meetings. We're planning a couple of new gatherings that will be all about hands-on radio.

On the fourth Tuesday of March, the 22nd, we will begin a new series of gatherings in person at Ridge Road Baptist Church, let by Tadd Torborg KA2DEW. We're calling this, "RARS Gathering and Hack-Day" to distinguish it from our regular monthly meetings, which will continue on Zoom for the time being. Activities will vary, but we'll have operating HF stations, a workshop area with tools and soldering stations, Morse Code practice, hanging antennas, and operating portable stations.

Guests are welcome. If you are a new ham or an experienced ham who likes to get together with other hams to "do radio," drop by at 7:00 at 2011 Ridge Road, in Raleigh beginning on the fourth Tuesday in March.

Speaking of portable stations, RARS is starting a special interest group for anyone who enjoys setting up and running outdoor stations, like Parks on the Air and Summits on the Air. Brantley West, K4CBW is leading this initiative. Monthly meetings are planned at nearby outdoor areas or parks, where participants can activate POTA stations or just get practice and advice with go boxes, battery operation, portable HF rigs, and more. Look for a first gathering in March. Details and locations will be announced on our web site when available, and will be announced on the nightly 2 meter needs on 146.64.

Our regular club meetings on the second Tuesday of each month will continue on Zoom for the time being. In March we'll have the RARS birthday, awards, and a program by acting RARSfest chair Nancy Torborg, KB2TNR, to update us on the latest information on our upcoming hamfest, which will be April 16. We'll see the latest on vendors, forums, projects, prizes, and other activities on March 8 at 7:30.

RARSfest is coming up fast. At the RARSfest page on RARS.org, you can buy advance tickets, register for tables, and sign up for volunteer shifts at the event. A benefit to members is the Members Sale Table, if you have ham-related items to sell and don't plan to operate a table yourself. Items to sell can be registered under the home button at <https://www.rarsfest.org/>

I've just finished a great long weekend of radio, working the South Carolina and North Carolina QSO Parties. I won't win any prizes for the number of QSOs, but I had a lot of fun and made contacts on 5 bands. I hope many of you were able to participate and that you had as much fun as I did.

John Honeycutt, N8ZU

RARS Gathering and Hack Day

Every 4th Tuesday of the month starting March 22, 2022.

7pm at the Ridge Road Baptist Church, 2011 Ridge Road, Raleigh, NC

Talkin on 146.64 -split, no PL

The key elements of RARS-Gathering-and-Hack-Day are social interaction and exploration of the various aspects of ham radio, including hands-on experiences.

Hack-Day: An opportunity for participants to teach a specialty to people who are receptive to tools or techniques outside their experience.

A time period set aside for an out-of-specialty project that may be started and completed outside the context of the normal work environment.

In a bridge club,	We get together and do what?	play Bridge?
In a chess club,	We get together and do what?	umm... Chess?
In a astronomy club	We get together and do what?	Look at stars?
In a shooting club	We get together and do what?	Targets?
In a ham radio club	We get together and do what?	Listen to Lectures?

Hmm... where did we go wrong?

RARS Gatherings are a collection of independent but concurrent activities, mostly in the same large room. Some outside, and we may have some smaller rooms available as well.

There will be no lectures.

All regular attendees should bring a hand full of [well labeled] tools and toys and a wish list of things to show and to learn.

We'll have a couple of HF ham radio stations in action throughout the two-hour gatherings. We'll set up two or three 20, 30 and 40m dipoles outside with RG8X coax fed to three tables in the fellowship hall. A half dozen other tables will be set up with chairs for some social and hands on project work. The space available will give us room for 50 or more people at a time.



KM4DVE and a 40m dipole



SWR and soldering

RARS Gathering and Hack Day Continued

It will take five or more people to set up the ham radio infrastructure elements of the gatherings, and another couple to deal with furniture. We'll do setup beginning at 6pm, in advance of the 7pm public start of the gathering to give us time for stringing coax and power, tables and chairs. After tear-down, at 9:30pm or so, we'll go out and have some pizza or something.

Back to questions.

How many of our members have gotten a chance to operate a tube transceiver, a Flex SDR radio, and an ICOM IC-7300? What if we have one of each hooked up and operational during each gathering?

Ever used a capacitive loop antenna? Would you want to try: A 2m SSB transceiver? 6 meter AM? A microwave link? A spectrum analyzer? Build a 5 element Yagi? Improve the frequency response of an audio circuit using caps and resistors? Use a Vector Network Analyzer (VNA)? Build a repeater? Tune a duplexer? Program a repeater controller?

We can do CW contacts across the room, FT8 around the world.

Hams are leaving the hobby and leaving RARS. We have plenty of new hams and plenty of people joining RARS, but they don't stay? Our turn-over-rate speaks to some disappointed people. We will address that problem head-on by providing a chance for participants to meet other hams, get hands-on experience with many aspects of the hobby, and find out how to participate in creating and operations of ham radio clubs, ham radio events (RARSfest, Field-Day, Walkathons, Emergency preparedness field exercises), and ham radio systems infrastructure (repeaters, packet radio networks, club ham stations). Hams who have a ham radio related technique, equipment, collection, award, or project to show may bring it and have space and opportunity to share their ham-radio-related item/project/technique with other hams.

We want to have some standard events:

Morse Code training

- First HF contact

- Practical FM operation including offsets, PL tones, desense, multipath/wave-theory

- Soldering Iron selection, wire splicing, and through-hole PCB soldering

- Crimping tools and parts as a utility for all hams (cash donations to fund resupply)

- Coax cable small run acquisition -- we'll try to keep RG8X and Low Loss 400 in stock (cash donations to fund resupply)

- Coax cable assembly and test.

- Mobile installation advice, critique, and help

- Antenna home-brew, tuning, and testing

- Introduction to Raleigh Amateur Radio Society and all of its functions.

RARS Gathering and Hack Day Continued



DC shack wiring



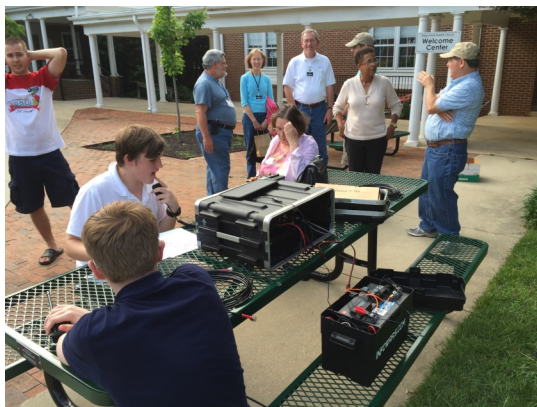
Operating 40m outside



Getting Started with DC wiring



Building Quarter Waves Antennas

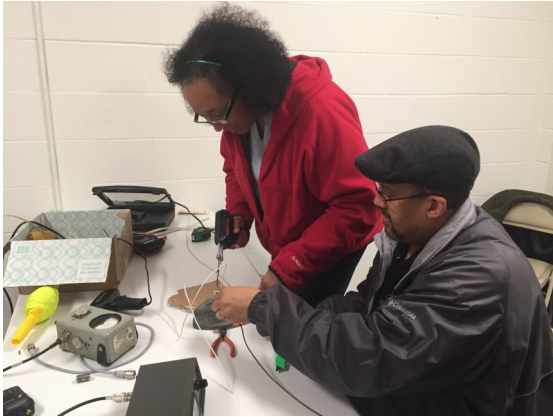


July 2016 Outdoor 40m Phone Operation



Exploring Different Feedlines

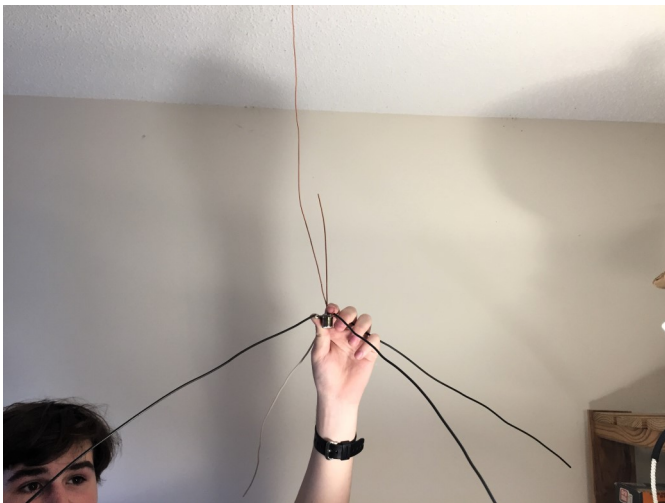
RARS Gathering and Hack Day Continued



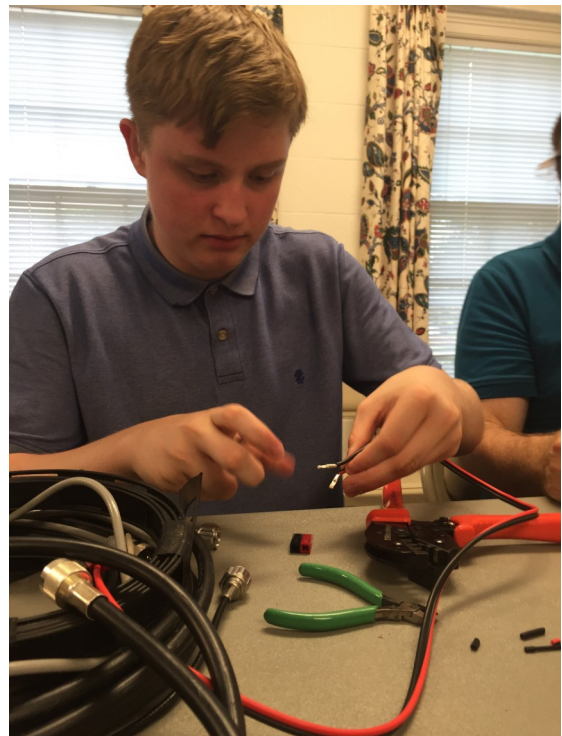
Soldering Lessons



Fin and Home-Brew 2 Element Yagi Measurements



Sam & a Dualband Groundplane



Crimping Powerpole® connectors

Does anybody want to play radio?

The 4th Tuesday of every month starting

March 22, 2022

7PM at Ridge Road Baptist Church, 2011 Ridge Road, Raleigh NC.

Talkin on 146.64 -split, no PL

73 Tadd KA2DEW

<http://torborg.com/a/rars-gathering-and-hackday.html>

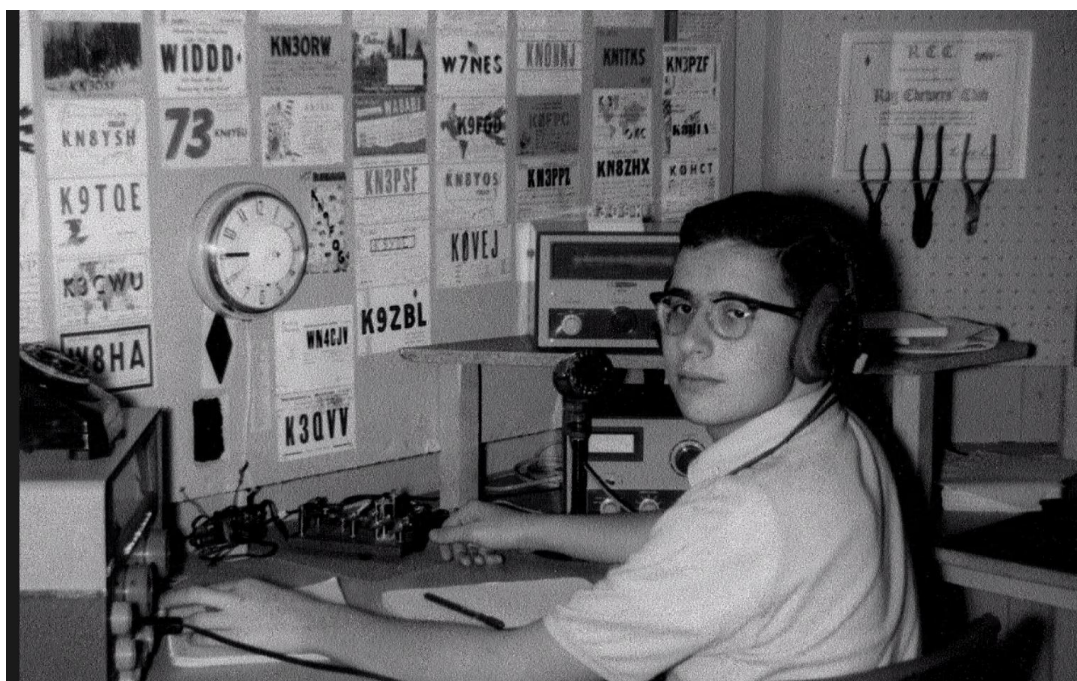
<https://www.rars.org>

February 8 , 2022 RARS meeting

The meeting was held on Zoom, as we have been since the covid-19 pandemic started. Many members connected from 7PM on. President John Honeycutt, N8ZU, ran the formal part of the meeting. See the meeting minutes on [page 21](#) for details. After the formal part of the meeting. Tom, N4TL introduced Gary Schwartz, K3OS of Hickory, NC. The title of his presentation is "The DSR Transceiver comes of age - a comparison: IC-7300 vs FTDX101D, plus Free Remote Station Operation".

IC-7300 vs FTdx101D

- Family Comparison
- One Person's Opinion



Gary Schwartz, K3OS in 1965 or so

February 8, 2022 RARS meeting presentation, continued

IC-7300 vs FTdx101D

Much to Love, but



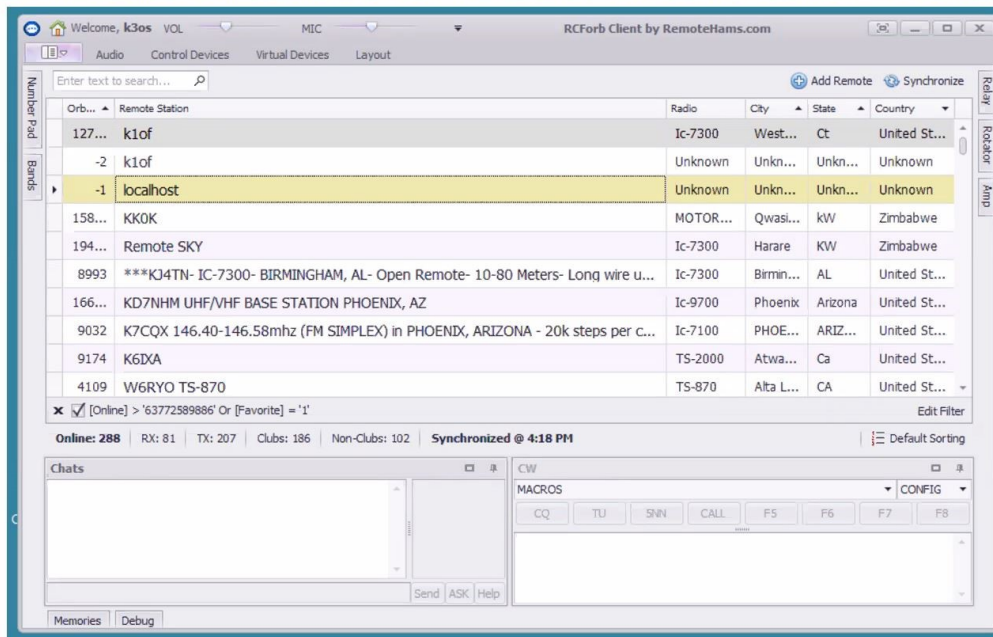
RemoteHams

- Free
- Windows & Android only
- SSB/CW/Digital mode operation
- Client / Server
- Supports most every rig
- Server on PC
- Uses Digital Interface or USB
- Custom Control Layout for Users
- Multiple Concurrent Users

Screen captures during the zoom meeting

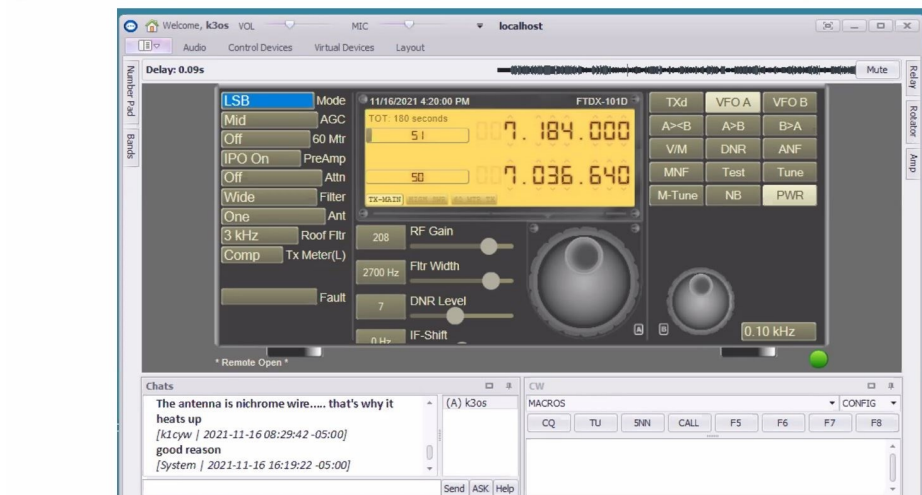
February 8, 2022 RARS meeting presentation, continued

RemoteHams – Start Screen



RemoteHams

RemoteHams – Radio Screen



Screen captures during the zoom meeting

February 8, 2022 RARS meeting presentation, continued

 Tom Lewis, N4TL Raleigh (Me)	 Carl Davis
 KM4JRH - Mark, Raleigh (Host)	 Charles KM4AMT Raleigh
 John Honeycutt N8Z... (Co-host)	 Charles WB4DCM Raleigh
 Ashby KB5ZIH-WROC992 NC U...	 Charles-WA4OSS
 Jeremy Lindsley K2HJX Raleigh	 Charley - KE4QBW - Raleigh
 Barry NC4AZ Cary	 Chuck WJ4A Raleigh
 Chuck, K4HF - Raleigh	 Chuck-K4RGN
 Conrad Veale	 Cliff KA7NSU Cary
 Jay KM4EP NC	 Curt W4CP
 Ryan - N7RYN	 Dave W4EIP Ral
 Aaron L. KN4ORB	 dennis wz0q
 AD4GX ken Raleigh	 Denny KO4IBL
 AJ4YA. Grady	 Dick KD4ISC
 Alan AB4OZ RALEIGH	 Doug AD4UL, Melbourne, FL
 Bob K4RLC	 Doug N3LTV Raleigh NC
 Bob. N4GEB	 Eric - NR4O - Cary
 Brantley K4CBW	 Gary K3OS Hickory
 Brian Young - KA9QJT	 Glenn KA4GLN

Screen captures during the zoom meeting

73 people attended the zoom meeting

February 8, 2022 RARS meeting presentation, continued

 GK	Greg KE4PAX	 MK	Mike KN4DRN Durham
 HN	Howard, N4KYW	 MK	mikebutler K4MBX Granville Co...
	Jack Coneybeer K8TO Denver, .	 MK	Murray, K4MHM, Raleigh, NC
 JK	Jerry KE4TTS Cary, NC	 NB	NC1X Bob Raleigh
 JK	Jim KM4WRK, Raleigh	 O	owner
	Joe n4bjh wake forest	 RK	Ray KF4AIB Raleigh
	Joe KM4WRQ	 RK	Richard K7RLH - Apex
	Joe n4bjh wake forest	 RN	Richard, N1FUA, Apex, NC
 JB	John Booth WB4DDK	 RC	Rob Cox (N4MN)
 JN	John N3DXR Mechanicsburg, PA	 RK	Rob K4RWR Raleigh
 K-	K2UCU - Tom	 RK	roger k4klk
	K4BYN Louis	 SN	Stephen NY4NC Wake Forest
	K4HM - Hank - Florida	 SW	Steve W4MGT
 K-	KE4IHX - Al. Roxboro	 TN	Tom NC4TS
 KB	KI4PAC Bruce		Tyler KO4BZA
 K	Kk4ugy	 V-	Victor - KO4VFM - Raleigh
 LR	Lee Rogers WB4DRJ	 W	W4WHW-Bill
	Marc W4MPS Clayton	 WA	Walker Armistead KD4YJX
		 WW	Wilbur WD4RDT

Screen captures during the zoom meeting

Future RARS Meeting Topics

Titles, topics, and speakers **subject to change.**

3/8/2022	Awards, RARS Birthday Party & RARSfest update	Nancy Torborg, KB2TNR
4/12/2022	Bridgecom DMR Presentation	Josh Landewee
5/10/2022	AUXCOMM	Virginia Enzor, NC4VA
6/14/2022	Field Day	Field Day Chair Curt Phillips, W4CP
7/12/2022	"Mid-air Refueling Mission & Communication Methods Used"	Awards committee & Joe Owen K4HEW

During the Zoom meetings please keep
your microphone muted.
Please edit your name so your
Name, Call and Location are shown.

The next few meeting of RARS will be held using Zoom at 7:30PM. Zoom is a conferencing application that runs on computers, tablets and phones. The meeting ID will be sent out to everyone via email.

Quick start guide for new Zoom users

https://support.zoom.us/hc/en-us/articles/360034967471-Quick-start-guide-for-new-users#h_b0c98dfa-d90f-486d-9617-71ab7b41a273

Zoom help center

<https://support.zoom.us/hc/en-us>

RARS Birthdays

Pete	NL7XM	03/
Carl	KJ4WD	03/01
Barbara	KK4TLY	03/02
Marty	W4MY	03/02
Bill	KN4GYS	03/04
Karl	W4CHX	03/06
Sharon	KD4ACK	03/06
Victor	KO4VFM	03/08
Rich	KR4AS	03/08
James	AJ4M	03/08
Kelly	KO4LRH	03/09
Matthew	KD9ABR	03/10
Bob	WA4ZZN	03/12
Pam	KK4IPN	03/13
Tom	KJ4ULP	03/14
Greg	KN6KIE	03/15
Larry	K4LXV	03/17
Roger	K4KLK	03/17
Eddie	WK4I	03/18
Murray	K4MHM	03/20
Chuk	KB4MDZ	03/21
John	W2KI	03/22
Greg	KE4PAX	03/23
Edward	WQ2X	03/25
Dave	K4DME	03/30
John	AF4ZE	03/30
Alaina	KK4HUX	03/30

Deepest Sympathies

A transfer of \$50 has been made to the RARS / Dick Bitner Youth Education fund in memory of Gregory Schweizer WD4GES (February 13, 1985 – February 7, 2022)

New Members

Robert Ruchte	K4RWR
Mike Jett	N4IQA
Victor Rosa	KO4VFM

RARS Monthly Dinner, NEW LOCATION

All members and guests are welcome to the monthly (first Tuesday) RARS Supper, 6:30PM, at the CHOW Restaurant, 8311 Creedmoor Road, Raleigh. The restaurant is at the corner of Brennan Drive and Creedmoor Roads, behind McDonalds. After entering the restaurant, go to the left rear to the private room. Informal and Dutch, just bring your appetite and best rag to chew. "Your attendance will help us retain the private meeting room."

RARS Membership links

Use the following link to verify / update your membership profile.

<https://www.rars.org/userprofile.php>

Use the following link to renew your membership.

https://www.rars.org/membership_renewal.php

HAM RADIO LUNCHEON

Everyone is welcome!

Every Thursday at 11:30 am

New York Diner, 909 McKnight Drive Knightdale.

<https://www.facebook.com/NewYorkDinerNC>

Check the latest information on the AB4OZ QRZ entry.

[QRZ.COM](https://www.qrz.com).

Hamfest Calendar

For details go to <https://www.arrl.org/hamfests/search>

Free AB4OZ Hamfest, Weather permitting

The free AB4OZ Hamfest will be Saturday, March 26, 2022. Setup at 9AM. Start time is 10AM. New location, Golden Corral Restaurant rear parking lot. 3551 Grenelle street, Raleigh NC 27603.

Check the latest information here [QRZ.COM](https://www.qrz.com).

<https://www.rars.org>

Greetings RARS Members

Spring is around the corner and, with it, a new public service event season will begin. As amateur radio operators and enthusiasts, we have a unique opportunity to serve our community by sharing our time and talent with various groups and charitable organizations to help ensure the safety and success of their fundraising and other worthy activities. In addition to serving our community, volunteering for these events also provides us the opportunity to put our equipment and knowledge to the test, practice our communication skills, hang out with fellow hams, and have fun all at the same time.

I am happy to announce that this year I expect to have a full schedule of at least 9-10 events. Each event needs several volunteer radio operators to ensure the transmission of consistent, accurate, and timely information to the event organizers. I will be asking for volunteers throughout the Spring, Summer, and Fall. Most of the events are bike rides that need both mobile and stationary operators to cover multiple routes up to 100 miles and the rest stops along the way. Other events, like the MS Walk on April 2, 2022, need only stationary and walking stations. We are hoping to add more events of this type in future seasons.

Information about the volunteer opportunities for 2022, and about volunteering for public service events in general, can now be found on the new website of Ham Public Service North Carolina (HPSNC) <https://www.hpsnc.org> and on the RARS website Public Service pages <https://www.rars.org/public-service.php>. HPSNC is a RARS Committee formed several years ago to promote participation in public service events throughout the Triangle area. You can sign up now to volunteer for specific public service events on either website. However, all sign-ups will be moved to the new HPSNC website in the near future. RARS membership is not required to volunteer for events.

RARS enjoys the distinction of being an ARRL Special Service Club that aims to provide active training, publicity programs, and operating activities. Public service events are ideal opportunities to do all of these things and to promote the amateur radio hobby. These are goals I hope we, as RARS members, all share.

Please sign up early and often and spread the word to fellow hams! If you have questions or want to know more about volunteering, please get in touch with me. I am looking forward to the season and to seeing many volunteers, new and old, at this years' events.

73, Jeremy Lindsley - K2HJX
RARS Public Service Director
k2hjsx@att.net <mailto:k2hjsx@att.net> 919-523-9631

An FT8 Beginner

By Denny Oestreich KO4IBL

The Ham Radio hobby can lead a beginner in many directions with different equipment and operating opportunities. I passed my Technician and General Licenses in 2020 and passed my Extra license in February of 2021 so I am relatively new to the HAM Radio experience. I started making HF phone contacts on 10M, 20M, and 40M. I made a few phone contacts, but I was at first a bit mic shy and the contacts were difficult for me to find. It seems that many experienced HAMS stay in fast contest mode. The old Joe Friday from Dragnet “Just the facts ma’m” urgency of some HAM contacts made me feel rushed and uneasy. For these reasons my interests turned to FT8. My first goals were to complete 100 mixed contacts and then to log FT8 contacts in all 50 states (WAS) on both 40M and 20M. I have recently completed making 101 FT8 DX contacts on 20M and 100 DX contacts on 40M. This is a summary of my equipment, my experiences and some of my thoughts/opinions.

Here is a list of the basic transceiver configuration and software tools I assembled for using FT8.

- My radio is an **ICOM IC-7300**. As they say, it worked right out of the box.
- My antenna is a **My Antennas EFLW 75-10**. The long wire is installed from a mast on my chimney to nearby trees at about 50 feet above the ground.
- I use a **Windows 10 PC** that is not dedicated for HAM use.
- For the connection between the IC-7300 transceiver and the PC, I use the recommended USB cable with ferrite cores on each end, purchased via Amazon. The most difficult of this connection was defining the USB identification on the computer.
- I installed the **WSJTX FT8** software for on my PC. The installation following the directions went well. The recommended Baud Rate settings of 115,000 would not work and I had to change to 19,200. Other Radio setting I used were Data bits = 8, Stop bits = 2, Handshake= None, PTT Method = CAT, Mode = Data/Pkt, and Split Operation = Fake It.
- To log contacts, I installed the **N3FJP Logbook** on my PC. This is a good logging tool with easy logging, sorting, search, edit and LoTW upload capabilities.
- I learned after a few contacts I would need a contact spotter, so I installed **Gridtracker** on my PC.
- The PC has a 21” monitor which gives plenty of screen space for WSJTX FT8 operation side-by-side the Gridtracker displays.
- I created an **LoTW account** to upload all contacts and keep track of contact progress and confirm all

logs. LoTW is easy to use with N3FPJ and helps you to monitor your awards progress.

I had heard other HAMs talking about working FT8, read several FT8 articles, watched a few FT8 YouTube videos and decided FT8 was an interesting challenge. My first FT8 contacts were made starting 7-17-2021. I used these FT8 contacts combined with my other 10M, 20M and 40M phone contacts to achieve my first award for DXCC mixed. Then I completed a Worked all States (WAS) using FT8 on 20M and 40M. My next goal was to complete 100 FT8 contacts (DXCC) on both 20M and 40M. I asked myself, how hard could it be to make contacts with 100 different countries, (DXCC).

This was not as easy as it sounded. I made my first FT8 contact on July 17, 2021. It took me seven months to get the 201 DXCC contacts logged in LoTW. Here are some things I have learned from this adventure. My opinions may not agree with yours but see what you think.

1. The biographies of HAMs on QRZ.com are interesting reading. I look up every contact I make in QRZ.com to copy and paste the name of each contact in the WSJT form. I also enjoy reading their bio information and seeing their pictures. Some HAMs have a lot of equipment and they obviously do not live in covenant-controlled neighborhoods. Their 80-foot towers and stacked antenna arrangements are amazing.
2. I changed my FT8 protocol from RRR at the ending to use RR73 on the last exchange. This makes the contacts go faster. I have seen that some HAMs QRZ bios say, "I will not log you if you do not send a "73" at the end of the contact". However, I have not determined if I am missing logged contacts because they did not log the contact for this reason.
3. When I see three or four FT8 contacts from the same country on Gridtracker, I choose the contact with the strongest signal. I have read the statements that say FT8 is a "weak signal mode and not a low power mode". I am not sure what they mean but, I usually get responses from the call sign with the stronger signal.
4. To get the 100 contacts needed for 20M FT8 DXCC and 100 contacts for 40M FT8 DXCC I logged a total of 223 contacts in different countries in my N3FPJ log. I compared the N3FPJ logs with LoTW for non-logged contacts. Over 10% of my successful contacts did not log our contact in LoTW. I had to go back and look for another contact in that country. I have not been successful with contacting someone else in countries like Dodecanese, Ceuta & Milla, Lesotho or Qatar. I am still trying. Maybe there is only one radio in these countries.
5. Gridtracker keeps all the contacts you make and highlights the call signs you have successfully made.

Sometimes you are tempted to make another contact with same call-sign and ignore the highlight. I hope they are not too offended by a repeat contact.

6. Gridtracker highlights new countries that you have not contacted before. However, if you do complete a contact with a HAM in that country and they do not log, I have not found a way to reset that country in Gridtracker. If the country comes up again in Gridtracker it will not be highlighted. You must watch carefully.
7. If I have a choice between two contacts and one has a 4-character call sign and the other has a 6-character call sign, I chose the 4-character call sign. HAMs with 4-character call signs seem to have more experience, better equipment, and take the time to log their contacts. I think your chances of completing a contact with a shorter call sign are better. You can always go back and try the other contact as a backup to ensure getting a logged contact.
8. Making 100 contacts starts out fast and furious with more than one opportunity for a new country contact at the same time. As you get nearer to 100, new contact opportunities slow to a crawl. Some days and evenings you may only see one possible new contact you need. It took me over a month to get the last four contacts I needed.
9. When I see a call sign for a contact I need, I stay with it. A CQ contact may be answering another call or two before they may get back to you. If you are persistent and patient enough there is a good chance, they will work you out of their pile-up.
10. I always try to get back to a call that comes in while I am working another call or when you transmit a CQ and get three replies. The contacts you do not get back to may be a new HAM or someone who only needs your contact to complete their WAS or DXCC.
11. The Grid tracker tools allow you to display only countries that are **“Not your DXCC”**. This make it easier to watch the roster list when there are only 30 to 40 DX entries instead of 100 with all the US entries.
12. I selected the Gridtracker option for **“Uses LoTW”**, but several contacts I made and which I followed on QRZ.com did not include LoTW in their logging list. So, they did not log our contact.
13. If you see in a contact’s QRZ bio the statement that they have a **“QSL manager”**, it may mean they don’t log. [Editor: It usually means you have to follow the manager’s instructions. You may have to mail a paper card to the manager, or use Paypal to send a payment for postage, or check into [Club Log: Log Search](#) and use their request a QSL card service (OQRS). Not all expeditions use it .]
14. When things get boring, and no needed contacts appear, you can always send a CQ message and someone from Italy, Germany, Texas or Arizona will surely answer your CQ.
15. I have lists of 25 countries for both 20M and 40M from which I could see call signs, but I could not complete a contact. I believe I was limited by two things, the orientation of my antenna and the pow-

er limit of my transceiver (100 Watts).

16. If I see a CQ with a North Carolina call sign and a strong signal, I always answer. They are not DX contacts, but they are hard to complete a QSO.
17. From my experience of 201 contacts, I have received four QSL post cards and six QSL Emailed sheets.
18. The final thing I learned for this article is the same as they say about chickens, "Don't count your contacts before they're logged".

Thanks to N4TL Tom (Tom Lewis) for the coaching to get me this far on FT8. My next challenge will be to continue to make FT8 contacts on 80M, 17M, 15M, 12M and 10M, but at a more leisurely pace. I am also pursuing learning CW and taking an ARRL CW test. If you see or hear my call sign, KO4IBL, be sure to take the time to make a contact. I have learned to log every contact as important.

Best Regards,

Denny KO4IBL

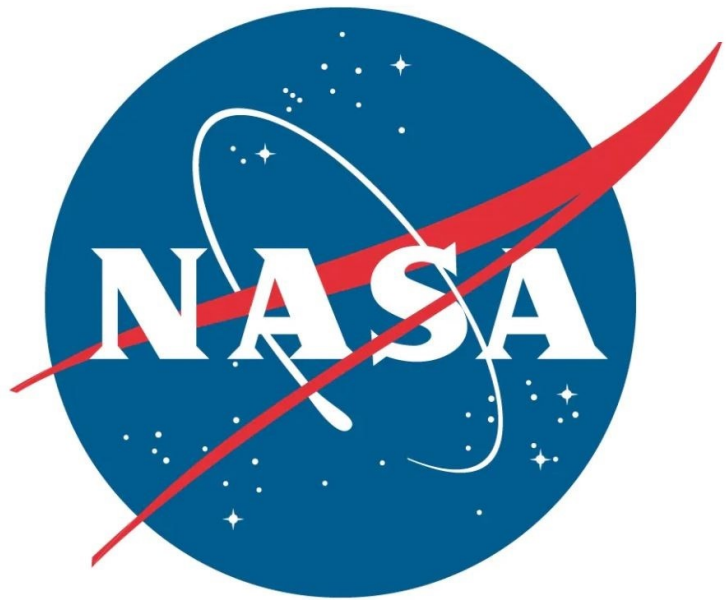
Beyond by Stephen Walker

I recently read the book *Beyond* by Stephen Walker. It is all about the race between the USA and the USSR to be the first to orbit a man around the earth. We all know the Russians won that race but guess what? They were not completely honest about it.

When Yuri Gagarin was 23,000 feet above the ground during reentry, he pushed the eject button and parachuted to the ground. The Russians stated that he stayed in the spacecraft all the way to the ground, which was a lie. They wanted to win the world altitude and a host of other awards that required Gagarin stay in the spacecraft all the way to the ground. He would have died on impact if he had stayed in it.

Yuri Gagarin held the rank of senior lieutenant before the space flight. Senior lieutenant is a grade between lieutenant and captain in the USSR. While he orbited the earth, he was promoted two levels. He landed as a Major.

73 Tom N4TL



NASA's Meatball logo was introduced in 1959, retired in 1975, then reintroduced in 1992. It pops up in a lot of movies and on merchandise. (NASA)

RARS SIG- Tarheel Scanner/Shortwave Listening Group Hits 30 Years Old!

By Curt Phillips W4CP, Founder

It was a dark and stormy night... well, it gets dark pretty early in February, so at least I'm sure it was dark. On February 17, 1992, the first meeting of a new RARS SIG called the Triangle Scanner/Shortwave Listening Group was held. Later, in an attempt to expand our influence to the entire state, we changed the name to the Tarheel Scanner/Shortwave Listening Group.

To keep expenses down because there would be no dues, we gathered in a meeting room of a local restaurant, Don Murray's Barbeque (SK) just north of the Beltline on US 1. I didn't know how many people would attend, so we met on a Monday night, typically the slowest night for a restaurant. Still, Don Murray's is far from alone in fading away after we held meetings at that restaurant.

Publicizing the event was a bit more difficult then than now. The Web was still very early in its growth, but using what Internet resources (USENET) were available, the word went out. The EXCITER (a few months before I became Editor) was used, along with an announcement at the RARS meeting (then at the YMCA on Hillsborough Street... also an SK now). The then flourishing BBS (computer bulletin board) world was also employed. This included my BBS, "The Triangle Telecomputer", the BBS operated by Mike Upchurch W4MLU (SK), "Frequencies 'R US" and a few other local BBSes announced the meeting also.



RARS SIG- Tarheel Scanner/Shortwave Listening Group Hits 30 Years Old! Continued

The first meeting had about 14 attendees (records have been misplaced), which I felt was an excellent start. At our peak, we had as many as 30 attendees at some of our meetings.

The purpose of the club was and still is to “help members increase their enjoyment of the radio hobby, whatever part of hobby radio they were interested in.” Ham radio was mentioned and many of us were licensed hams, but it was not pushed.

For a long time, some shortwave listeners had been pushed by well meaning friends to get into ham radio, such that they felt that SWLing was considered an inferior hobby. They, of course, resented that. And many scanner listeners of those days didn't even know about ham radio, or the repeater frequencies they might monitor.

Over the years, most of our members have become licensed hams, but never with any pressure on them. For many years we had a weekly net on the RARS .64 repeater, and they wanted to participate in that, or they just saw that ham radio was another part of hobby radio in which they that wanted to participate.

Over the years, we have made trips to the Voice of America transmitter facility outside of Greenville (twice!), the NC Highway Patrol's Communications Headquarters, and the RDU Airport Control Tower among other field trips.

And over the years, the targets and methods of shortwave listening and scanning have changed greatly, and one of the goals of the group is to teach and help members with the changes and how to integrate them into their radio monitoring.

Special kudos to Kelly Mills AE4FG and Bob Zeher KE4JYV taking over and keeping things going during my two and a half year exile in Houston during the late '90s! (*LONG story*)

Like most clubs, during COVID we have taken our meetings virtual, but that has allowed us to have some GREAT speakers from places far away. But we still had an in-person meeting for our Christmas “junk swap” last year, and we're looking for a new meeting place since our pre-COVID restaurant has reconfigured their restaurant space!

So stay tuned on the RARS website, the RARS net and our various related mailing lists for information on the resumption of in-person Scanner/SWL Group meetings. Feel free to come whatever your interests, we'll make sure you feel welcome! Remember, our motto is, “If its electronic and expensive, we LIKE it!”

YOUTH LOUNGE

Hi all,

In an effort to increase youth activity on the amateur bands, RARS is seeking to increase its outreach to youth in Wake County.

Given current pandemic restrictions, we hope you will find youth under your roof, in your "bubble", or otherwise within arm's reach to join you in your enjoyment of amateur radio. Now is a great time to start thinking about your Field Day plans and how you might use some younger assistants in putting together a new antenna. Or perhaps there is a broken piece of equipment whose time has come to be in pieces on the kitchen table. Invite the uninitiated to join you with the multimeter.

Once the pandemic subsides, we plan to increase our outreach beyond our bubble to bring amateur radio to youth-serving organizations, such as Boy and Girl Scouts.

WILL YOU HELP US?

Please take a moment to complete the survey at the link below. In the near future we'll be rolling out monthly youth activities. We'd like to measure the depth of our volunteer pool so that we may plan accordingly.

RARS youth outreach survey: <https://forms.gle/bRSPbLrShDrWRsvY7>

Respectfully,

Brantley West K4CBW

Upcoming Events for Youth Participation

April 18, 2021: ARRL Rookie Roundup - Phone

June 19, 2021: ARRL Kid's Day

June 26-27, 2021: ARRL Field Day

PSE Send Us Photos!

Please send photos of youth "playing radio" to Brantley K4CBW for inclusion in the Exciter, with a caption. Whether operating, building, or otherwise assisting, we'd love to see your youth in action!

RARS Classifieds

Copied from <https://www.rars.org/classifieds.php>

The items below were listed within the last 30 days on the RARS website.

Check the RARS Classified List on the RARS website regularly for new items.

Posted February 23rd, 2022 by: K4HEW

Contact: k4hew.joe@gmail.com

Dell Inspiron 7591 2n1 laptop computer - almost new as lady who purchased it last fall has a neuro-muscular disease and discovered that she cannot use the keyboard at all. The laptop looks and operates like a new one:

- * 15" unit with a touch screen feature
- * Intel i7 Processor @ 1.8 GHz
- * 500 GB SSHD
- * 12 GB RAM
- * Windows 10 Home
- * Mouse
- * Includes nice durable carrying bag
- * Service Tag: BYSJPT2

\$550.00 OBO [new was \$950.00]

(owner's name is Margaret Lee and I am just trying to sell it for her)

Hallicrafters SX-111 Receiver

Posted February 21st, 2022 by: W4MGT

Contact: jenx4321@gmail.com

This is a super clean, complete, working, Hallicrafters SX-111 Receiver. It covers the 80, 40, 20, 15, and 10 meter ham bands and WWV 10 MHz. The original paint has a few chips and a couple of scratches. Overall, it looks great. It has been re-capped, rectifier replaced, 3 wire line cord installed, and a PL259 antenna connection added in the back. \$200

FLEXRADIO 6400 FOR SALE

Posted February 17th, 2022 by: K4DME

Contact: Dme261@gmail.com

Flexradio 6400 with ATU Purchased New August 2021

Asking \$1900.00

<https://www.rars.org>

FS: Test equipment - all working, all with AC cords ONLY

Posted February 13th, 2022 by: AG4AY

Contact: todd.nichols@ieee.org

Links to pictures below; email contact preferred; can meet up somewhere in the RTP area or your QTH.

HP 6207B DC Power Supply, 0-160V, 0.2A - \$25

<https://i.imgur.com/0W77SQA.jpg>

HP 6284A DC Power Supply, 0-20V, 0-3A - \$25

<https://i.imgur.com/EewJR99.jpg>

Wavetek Model 23 Synthesized Function Generator, 12 MHz, with GPIB - \$50

(oscilloscope in pictures is not included)

<https://i.imgur.com/KUVnBRB.jpg>

<https://i.imgur.com/pSWRPu5.jpg>

<https://i.imgur.com/9nCXKga.jpg>

<https://i.imgur.com/ytMkhBy.jpg>

HP 438A 2-channel RF Power Meter with GPIB - \$80

(RF sensor and RF sensor cables in pictures are not included)

<https://i.imgur.com/qgOoETc.jpg>

<https://i.imgur.com/aRuy94P.jpg>

<https://i.imgur.com/XaPBB53.jpg> - showing noise floor with 8481A sensor, ref osc off

DVMEGA GMSK Modem Arduino Shield with Arduino and Cables for D-Star Hotspot - \$40 OBO

Posted February 13th, 2022 by: KA9QJT

Contact: ka9qjt@hotmail.com

The DVMEGA GMSK Modem adapter allows you to build a higher power D-Star Hotspot using your Icom or Yaesu radio, with a 9600 baud packet data port (6 pin mini-DIN).

The DVMEGA GMSK shield is attached to an Arduino Unu (included) and connects via USB cable to a Raspberry Pi with Pi-Star software (not included).

Details on the GMSK board can be found at the website: dvmega.nl

Included:

DVMEGA GMSK shield

Arduino Uno computer (the software required is already flashed into the Arduino)

USB A to B Cable

6 pin mini-DIN Male to 6 pin mini-DIN Male cable, as used with my Yaesu radios

Brian - KA9QJT

ICOM 7300, Vibroplex keyer, Samlex: SEC 1235M

Posted February 10th, 2022 by: KN4GYS

Contact: wcroninger1@mac.com

Selling my station which consists of the above equipment as well as assorted cabling. I do have two antennas, one a very well used Hygain 14AVQ and the other a home-brew inverted V. If you might be interested please contact me and I can provide you with pictures of all. Willing to separate components.

Arrow II Satellite Handheld Beam Antenna 146/437-10WBP

Posted February 7th, 2022 by: N4IZE

Contact: thoswan@att.net

This is an aluminum light weight boom with duplexer. Use one 146/440 handheld or other radio with this antenna. The antenna is in mint condition and is handheld. For additional information: <http://www.arrowantennas.com/arrowii/146-437.html>

New: \$ 163.00 from manufacturer.

Asking 140.00 or obo.

Contact me by email or text 919-412-4229 Pickup at my QTH.

Thomas

N4IZE

FS: Antenna Tuner

Posted January 31st, 2022 by: W4BOH

Contact: infomet@embarqmail.com

Large, heavy, homebrew T network tuner.

Coax in to coax out.

Good for KW, at least.

Priced low for quick sale, \$50.

Pick up in Hillsborough or Morrisville.

Email for details, infomet@embarqmail.com

Wilson

W4BOH

<https://www.rars.org>

RARS Board Meeting Minutes

18 January, 2022 - 7 PM via Zoom

In attendance:

John N8ZU, Tom N4TL, Alan AB4OZ, Tadd KA2DEW, Carl W8WZ, Hank K4HM, Chuck K4HF, Jeremy K2HJX, Ken AD4GX, Curt W4CP, Greg KE4PAX, Julie NC4JR, Joe WA4GIR, Brantley K4CBW, Nancy KB2TNR.

Call to Order:

John called the meeting to order at 7:00 PM.

A quorum was present and past minutes were approved.

John initiated a discussion concerning the proposed questionnaire changes to the membership form. Hank outlined the work he has already done surrounding suggested modifications. Greg noted that we weren't doing much with the current data. Jeremy indicated that he is using the data for public service.

Old Business:

- *Nancy will investigate the physical feasibility of the hamfest. And will get a feel for staffing requirements.
- There is a question as to the food service for RARSfest. To be addressed later.
- Greg returned to the subject of offering a new level of membership for students.
*Discussion tabled until John sends an e-mail to the BoD.

New Business:

- *Hank, Greg and Mark will compile a list of changes to present to the board. Item will be tabled temporarily, until said list is complete.
- John raised the question of when we should starting meeting in person, and noted that there is no practicality in meeting next month, based on the discussions with the church. The discussion is tabled until next month.
- Hank came up with a document dealing with NC non-profit regulations. *John and Hank will set a link to the doc for all the board to see.

RARS Board Meeting Minutes Continued

- John brought up the idea of having a volunteer coordinator. Jeremy volunteered to take that position if implemented. He also created a corresponding document, describing the duties of that person. The proposal is postponed until after RARSfest.
- Jeremy presented a proposal to separate the Public Service activities from the RARS club. In the past, a group, HPSNC has operated the public service activities. RARS would maintain the ownership of the separate web site and the current link on the RARS web-site would point to the new website. Karl added that RARS foot the bill and that the PS director have full access. For simplification, the proposal has been included below.
““You may be aware that under my predecessor, John Stone (K3RLH/SK), the RARS public service component operated as HPSNC, a RARS committee but with a degree of separation from the club. I do not know the full history of the HPSNC formation, but my understanding is that this arrangement would help to attract a wider volunteer base that includes hams from other clubs around the region. The attached 2017 proposal to the Board best summarizes the idea. The earliest use of the name I have found appears in a notice in the attached November 2013 Forsyth Amateur Radio Club Newsletter (p. 2).

John used a rudimentary HTML site where volunteers could sign up, get event day info, and download documents about being a ham volunteer. I would like to return to the use of HPSNC as an organizational and recruiting tool with a modernized website. To that end, I have secured the HPSNC.org URL. I have created a new website at <https://www.hpsnc.org> which is live but hidden from search engines at this time. The link will take you there as will entering the address in your search bar. Please take a look. The cost of the site is minimal and I will continue to cover it.

You may recognize the HPSNC logo from the picture I sometimes use during zoom meetings when my camera is off. You may have also seen it elsewhere in RARS documents or in your volunteer activity. As far as I know, John Snellen (AI4RT), who preceded John Stone, created the graphic. I have found only one other entity, ham radio related or otherwise, using “HPSNC”. It is a non-profit horse rescue called Horse Protection Society of North Carolina, Inc. Its URL is <http://horseprotection.org>. There seems little chance of confusion between the two.”“

After the revised wording, the motion was passed unanimously.

RARS Board Meeting Minutes Continued

Officer Reports:

- VP Report – Next months program will be will be “A Comparison of the Icom 7300 and the Yaesu FTDX-101D”, By Gary Schwartz. The next will be “Fuel Tanker Communications” Looking for future presentations.
- The Secretary was absent so no report was given.
- Treasurer – 406 members. Greg presented assets and inventory and RARSfest expenses. Income included proceeds from some equipment sales and doughnut sales at the State Fair. Also monies from the QSO party. Taxes have been sent.
- Public Service Director – *Jeremy will update the Facebook page.
- The Education Director - No report
- The Field Day Chair - Planning is going well. Most of last years will be contacted for this year.
- Repeater Chair - Did site surveys. Alan shot video under the shed to investigate the problem with the floor tiles coming up, but found no problems at the Bayleaf site. *Greg will follow up with Chuck DeCourt dealing with the phone issue.
- RARSfest Chair - Nancy Torborg gave an update on the progress of planning RARSfest.
- Exciter Editor Tom N4TL - Input due by Jan. 29.
- Food Service Director - No report.
- Net Manager Julie KT4JR – No report.
- ARRL Liaison Chuck K4HF – Dr. Jim Boehner contacted Chuck and congratulated RARSfest as being the Roanoke Division Convention this year. And is looking forward to being here. Bill Morine will support us as well.
- NCQP Chair – Going well.
- VE Team Leader Joe WA4GIR – Planning a VE session for RARSfest.
- Webmaster Hank K4HM – Has not heard from Devon Hedge. *Hank will contact him.

RARS Board Meeting Minutes – continued

Has made some modernization changes to the web site. Created a database ,update, log-file. Added the PS Chair job description to the web page.

- Youth Director Brantley K4CBW – Gave an update on Solar Pack team at NC State. They have already begun testing. A build-a-thon program is upcoming. Working on Winter Field Day. *Brantley will contact John Brier to discuss details.
- At large Director AB4OZ – Suggested Brantley contact new HAMs to be pointed to the repeater etiquette document.
- At large Director Tadd KA2DEW No report.
- At large Director Ken AD4GX No report.
- Carl reported, as trustee, that all is well. W4DW will be used for Winter Field Day. Greg noted that an additional person can be added to assist the Trustees. *Carl will look into that. RARS gets the SERA Journal rather than the individual Trustees.

Additional comments:

John returned to Jeremy, who outlined his updated proposal, which, again is included below. After a Q&A, John motioned that the reference to John Stone be removed. The board approved the motion.

"Motion to establish the Ham Public Service North Carolina (HPSNC) group as a RARS committee. HPSNC will operate a separate website for the recruitment and organization of volunteers for public service events. The website will become the property of RARS with full access thereto to the RARS Board and any successor Public Service Directors. The RARS Public Service Director and HPSNC committee will manage the HPSNC website and volunteer activities. Other radio clubs may be become co-sponsor of the HPSNC group and appear on the HPSNC website and promotional materials."

* denotes an action.

The meeting adjourned at 9:06.PM

Respectfully Submitted,

Mark Kilmer,
Secretary.

RARS Membership Meeting Minutes

RARS Club meeting minutes

8 February 2022 - 7 PM via Zoom

Call to Order: John Honeycutt

Pledge of Allegiance recited.

John invited guests, new members and upgraded licensees to introduce themselves. We had;

One new member:

One Visitor:

No Upgrades:

A quorum was present.

January minutes approved.

Officer Reports:

- President – Next BoD meeting will be held next week @ 7:00 PM. Contact one of the officers for the Zoom login. Also, if a slot is needed on the agenda, contact John directly.
- Vice President – Announced upcoming meeting presentations.
- Secretary - No report.
- Treasurer – 409 current members. Greg covered assets, income and expenses, including an \$82.00 transfer to the Dick Bitner Fund. Greg brought to the attention of the club, two RARS members who have recently become Silent Keys.
- Repeater Chair - No report.
- Exciter Editor – No report.
- Net Manager - No report.
- The Public Service Director – Jeremy indicated that this year's event schedule is shaping up well. He also noted the new Public Service website, HPSNC.org where individuals can sign up to participate in the various events.
- Field Day Chair - No report.
- ARRL Liaison - No report.
- Education Director - No report.
- Youth Director – Brantley West noted upcoming youth events, including the ARRL Stu-

RARS Membership Meeting Minutes – continued

dent Round-up, the 18th of February and mentioned that the NCQSO party.

- At large director - Alan Pitegoff – Announced upcoming hamfests, and an estate sale this coming Saturday. Alan also put out a request for RARSfest volunteers, noting the sign-up page on the web site.

At large director – Ken Latchum - No Report.

- At large director – Tadd Torborg - No Report

Additional comments:

Chuck Till mentioned there are only 67 days until RARSfest.

Program

Tom Lewis introduced tonight's program, "A comparison of the Icom 7300/7610 vs, the Yaesu FTdx10/101D". Presented by Gary Schwartz, K3OS.

The meeting adjourned at 8:54 PM Eastern Time.

Respectfully Submitted,

Mark Kilmer

RARS Secretary

